

Title (en)  
THREE-DIMENSIONAL CULTURE OF IMMORTALIZED SKIN CELLS HAVING SUPERFICIAL LAYER FORMED FROM STRATUM CORNEUM,  
METHOD FOR PRODUCING SAID THREE-DIMENSIONAL CULTURE, AND METHOD FOR EVALUATING TEST SUBSTANCE USING SAID  
THREE-DIMENSIONAL CULTURE

Title (de)  
DREIDIMENSIONALE KULTUR VON IMMORTALISIERTEN HAUTZELLEN MIT EINER OBERFLÄCHENSCHICHT AUS STRATUM CORNEUM,  
VERFAHREN ZUR HERSTELLUNG DIESER DREIDIMENSIONALEN KULTUR UND VERFAHREN ZUR BEWERTUNG EINER TESTSUBSTANZ  
UNTER VERWENDUNG DIESER DREIDIMENSIONALEN KULTUR

Title (fr)  
CULTURE TRIDIMENSIONNELLE DE CELLULES CUTANÉES IMMORTALISÉES AYANT UNE COUCHE SUPERFICIELLE FORMÉE DE  
STRATUM CORNEUM, PROCÉDÉ DE PRODUCTION DE LADITE CULTURE TRIDIMENSIONNELLE, ET PROCÉDÉ D'ÉVALUATION D'UNE  
SUBSTANCE D'ESSAI À L'AIDE DE LADITE CULTURE TRIDIMENSIONNELLE

Publication  
**EP 4095235 A4 20240306 (EN)**

Application  
**EP 21743842 A 20210121**

Priority  
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Abstract (en)  
[origin: EP4095235A1] Provided is a three-dimensional culture (10) of immortalized skin cells (2), comprising a plate-like substrate (1) and a culture layered product of immortalized skin cells adhering to the surface of the plate-like substrate, in which the superficial layer (3) of the culture layered product is composed of a stratum corneum. The three-dimensional culture can be produced as follows: immortalized skin cells are seeded on a top surface of a culture medium-impregnated plate-like substrate, and three-dimensional culture is performed while applying stress on a superficial layer of an immortalized skin cell layer formed by layering of the immortalized skin cells. The three-dimensional culture can be used to evaluate the sensitization of a test substance.

IPC 8 full level  
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CPC (source: EP)  
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Citation (search report)  
• [Y] JP 2018102186 A 20180705 - NIPPON MENAAGE KESHOHIN KK  
• [Y] WO 02070729 A2 20020912 - STRATATECH CORP [US], et al  
• [XYI] YU INOUE ET AL: "Development of 3D imaging technique of reconstructed human epidermis with immortalized human epidermal cell line", EXPERIMENTAL DERMATOLOGY, BLACKWELL MUNSGAARD, COPENHAGEN; DK, vol. 27, no. 5, 6 June 2018 (2018-06-06), pages 563 - 570, XP071778823, ISSN: 0906-6705, DOI: 10.1111/EXD.13672  
• [A] POUMAY Y ET AL: "A simple reconstructed human epidermis: preparation of the culture model and utilization in in vitro studies", ARCHIVES OF DERMATOLOGICAL RESEARCH, SPRINGER BERLIN HEIDELBERG, BERLIN/HEIDELBERG, vol. 296, no. 5, 1 October 2004 (2004-10-01), pages 203 - 211, XP002510240, ISSN: 0340-3696, DOI: 10.1007/S00403-004-0507-Y  
• [Y] NATSCH ANDREAS ET AL: "Reporter cell lines for skin sensitization testing", ARCHIVES OF TOXICOLOGY, vol. 89, no. 10, 21 July 2015 (2015-07-21), DE, pages 1645 - 1668, XP093116654, ISSN: 0340-5761, Retrieved from the Internet <URL:http://link.springer.com/article/10.1007/s00204-015-1555-0/fulltext.html> DOI: 10.1007/s00204-015-1555-0  
• See also references of WO 2021149761A1

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